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EXAMINER

HALPERN, MARK

ART UNIT PAPER NUMBER

1731

DATE MAILED: 01/03/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/895,160

Applicant(s)

MALMSTROM ET AL.

Examiner

Mark Halpern

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2002 and 19 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 and 40-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26, 40-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- 1) Acknowledgement is made of Amendment received 9/13/2002, Paper No. 7.

Applicants amend claims 6 and 18, and cancel claims 27-39.

Acknowledgement is made of Supplemental Amendment received 11/19/2002, Paper No. 8. Applicants amend claims 1-5, 13-14, 19, 40-42.

Claim Objections

- 2) The amendment filed 11/19/2002, is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

Claims 1, 13, recite the terms "...essentially free of unsaturated...", and claim 40, recites the term "... free of unsaturated...".

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3) Claims 1-24, are rejected under 35 U.S.C. 102(b) as being anticipated by Brungardt (5,766,417).

Claims 1-2, 5, 13-14, 17, 19; Brungardt discloses process for producing a paper for high speed converting or reprographic operations (col. 1, lines 1-15) in which 2-oxetanone size is added (col. 3, lines 31-32) to the pulp slurry (col. 6, lines 12-16). The 2-oxetanone is prepared from such acids as palmitic, isostearic and stearic saturated fatty acids (col. 4, lines 57-67) with the saturated bond linear-chain and branched-chain comprising 2 to 40 carbon atoms (col. 4, lines 14-28). It is inherent that saturated fatty acids do not contain unsaturated bonds. Paper made is disclosed in Examples 1-3 (cols. 9-10).

Claims 3, 15; linear to branch chain fatty acid ratios are disclosed in Examples.

Claims 4, 16; the amounts of 2-oxetanone size added to the slurry is disclosed as 25-70 % (col. 4, lines 36-40).

Claims 6, 18; the 2-oxetanone size is added at the rate of 1.5 pounds per ton per to of fiber weight (col. 6, lines 55-64).

Claim 7; additionally alkenyl succinic anhydrides are added to the web (col. 3, lines 40-45, and col. 5 line 26 to col. 6, line 27). The R and R" components of the 2-

oxetanone of formula disclosed by Brungardt (col. 4, lines 14-31) are hydrophobic, making the size a hydrophobizing size.

Claims 8-10, 20-22; Brungardt discloses a mineral filler as precipitated calcium carbonate (col. 8, lines 1-9).

Claims 11-12, 23-24; the method is conducted under conditions bordering on neutral of pH of 7.8, and under alkaline conditions of pH of 8.0 (col. 8, lines 1-9).

4) Claims 25-26, are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Brungardt. Brungardt discloses process for producing a paper for high speed converting or reprographic operations (col. 1, lines 1-15) in which 2-oxetanone size is added (col. 3, lines 31-32) to the pulp slurry (col. 6, lines 12-16). The 2-oxetanone is prepared from such acids as palmitic, isostearic and stearic saturated fatty acids (col. 4, lines 57-67) with the saturated bond linear-chain and branched-chain comprising 2 to 40 carbon atoms (col. 4, lines 14-28). It is inherent that saturated fatty acids do not contain unsaturated bonds. The 2-oxetanone based paper is disclosed in Examples 1-3 (cols. 9-10).

In the event any differences can be shown for the product-by-process claims 25-26, as opposed to the product taught by the reference Brungardt, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results; see also *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985).

5) Claims 40-42, are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Brungardt. Brungardt discloses

a 2-oxetane based paper size (Examples 1-3, cols. 9-10). In the event any differences can be shown for the product-by-process claims 40-42, as opposed to the product taught by the reference Brungardt, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results; see also *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985).

Response to Amendment

- 6) Cross Reference section, indication that application 09/380,752 has been abandoned, is accepted.
- 7) Claims 6, 18, 32, rejection under 35 U.S.C. 112, second paragraph, is withdrawn in view of amended and cancelled claims.
- 8) Applicant's arguments filed 9/13/2002 and 11/22/2002, have been fully considered but they are not persuasive.

Applicants allege that the present invention requires the fatty acids comprising 2-oxetanones to be fully saturated. In contrast, the cited prior art, Brungardt, recites at least 25% of the fatty acids be unsaturated, thus the cited reference does not anticipate the present invention.

The argument is not well taken. The cited reference, Brungardt, as in item 2 above, discloses that 2-oxetanone is prepared from saturated fatty acids. Brungardt teaches of the use of saturated or unsaturated fatty acids (col. 4, lines 25-30). The saturated fatty acids are disclosed by Brungardt in col. 4, lines 57-67, said saturated

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fatty acids are the same saturated fatty acids as disclosed in Table 1 of present specification.

Applicants allege that the present invention requires the fatty acids comprising said oxetanones to be fully saturated as indicated in specification on page 5, lines 9-11.

Examiner responds as follows. The specification, on page 5, lines 9-11, refers to Davis (2,627,477) and Tappi references, merely indicating that said references do not mention the use of 2-oxetanones produced from saturated fatty acids. The present specification does not recite that the fatty acids comprising 2-oxetanones be fully saturated.

Conclusion

9) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Halpern whose telephone number is 703-305-4522. The examiner can normally be reached on Mon-Fri, (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 703-308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7718 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone no. is 703-308-0651.



Mark Halpern
Patent Examiner
Art Unit 1731



STEVEN P. GRIFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

December 30, 2002